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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/453,918	04/27/2000	Hwa Kyung Lee	Q58987	1307

7590 01/04/2005

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EXAMINER
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LIN, KENNY S

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 01/04/2005

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/453,918  
Filing Date: April 27, 2000  
Appellant(s): LEE ET AL.

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Diallo T. Crenshaw  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 9/13/2004.

**(1) *Real Party in Interest***

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A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

The amendment after final rejection filed on 5/11/2004 has been entered.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The rejection of claims 2-14 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

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Kotola et al., US 6,321,257 B1, Published on November 20, 2001, but filed on January 15, 1999 (hereinafter Kotola).

Kraft et al., US 6,487,424 B1, Published on November 26, 2002, but filed on January 13, 1999 (hereinafter Kraft).

Tuoriniemi et al., US 6,470,197 B1, Published on October 22, 2002, but filed on May 6, 1999 (hereinafter Tuoriniemi).

Mitchell et al., US 5,966,671, Published on October 12, 1999, but filed on January 3, 1996 (hereinafter Mitchell).

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 4, 8, 10-11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotola et al (hereinafter Kotola), US Patent 6,321,257, in view of Kraft et al (hereinafter Kraft), US Patent 6,487,424.

As per claim 4, Kotola taught the invention substantially as claimed in claim 4 including a method for executing an object in a wireless internet access terminal, comprising the steps of:

- a. Interpreting data inputted through the internet and displaying the inputted data on a screen (col.2, lines 32-37, col.3, lines 17-32, 59-65, col.8, lines 64-67, col.9, lines 1-10) of the wireless internet access terminal, said data including plural objects that are each linked to predetermined resource access location information (col.3, lines 24-32, col.7, lines 4-14, col.8, lines 64-67, col.9, lines 1-10).

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Kotola did not specifically teach to focus any one of the objects displayed on the screen and to display plural execution items sequentially one by one by displaying one of the plural execution items of the focused object on one screen and executing an execution item displayed on the present screen by inputs from a button. Kraft taught a data entry method to focusing (highlight) any one of plural objects (fig. 6, col.1, lines 20-27, 30-36) and to display plural execution items sequentially one by one by displaying one of the plural execution items of the focused object on one screen (abstract, col.1, lines 20-27, 30-36, 52-59) and executing an execution item displayed on the present screen by inputs from a button (fig. 6, col.1, lines 52-59, col.2, lines 28-41, col.3, lines 35-40, col.12, lines 63-65). One would have been motivated to adapt Kraft's teaching of displaying plural execution items to implement said calculator functions in their mobile phone systems using such displaying and item focus method (col.12, lines 28-67). One would have also been motivated to use Kraft's displaying method since it supports complex signs displaying that includes said Chinese characters or so on (col.3, lines 11-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola and Kraft because Kraft's teaching of displaying plural execution items sequentially one by one provides an organized screen display and allows user to easily view and pick the desire objects which includes complex signs or characters (col.1, lines 20-27, 30-36).

As per claim 8, Kotola and Kraft taught the invention substantially as claimed in claim 4. Kotola further taught to include that wherein the execution items of an object include operations of updating a screen while navigating according to the resource access location information (col.7, lines 4-10); updating a screen for displaying the resource access location information

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(col.7, lines 10-18); and storing the resource access location information in a temporary storage unit to be immediately accessed in the necessity of a user (col.7, lines 19-28).

As per claim 10, Kotola and Kraft taught the invention substantially as claimed in claim 4. Kraft further taught to sequentially display the execution item one by one on the screen (fig. 6, col.1, lines 52-59, col.2, lines 28-41, col.3, lines 35-40, col.12, lines 63-65) and that execution items are stored in a storage unit, and one execution item is read from the storage unit by an input from the button to be displayed on one screen, so that plural execution items are sequentially displayed on the screen one by one (fig.5, col.1, lines 20-27, 52-59). Kotola and Kraft did not specifically teach that the execution items including “get”, “information view”, “bookmark”, and “cancel” are sequentially stored in a storage unit. However, storing execution items in sequence in a storage unit sequentially is well known in the art. One of ordinary skill in the art would have noticed that such storage method could be programmed using a circular link list structure. Furthermore, it is a design choice for the maker of the invention to provide different execution items as needed to execute the desired commands. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and sequentially storing the execution items and displaying by an input.

As per claim 11, Kotola and Kraft taught the invention substantially as claimed in claim 10. Kotola further taught to use a database as a storage unit (col.7, lines 23-28). Kotola and Kraft did not specifically teach that storage unit is a flash memory. However, it is well known in the art that use a flash memory as either the memory for a device or a hard drive. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the

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teachings of Kotola and Kraft and use a flash memory as a storage unit similar to how many digital cameras function for the Kotola and Kraft's apparatus as design choice.

As per claim 14, Kotola and Kraft taught the invention substantially as claimed in claim

4. Kotola further taught that each object is defined by at least one HTML tag (col.7, lines 28-51).

Claims 2-3, 9 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotola et al (hereinafter Kotola), US Patent 6,321,257, in view of Kraft et al (hereinafter Kraft), US Patent 6,487,424, and Tuoriniemi et al (hereinafter Tuoriniemi), US 6,470,197.

As per claim 2, Kotola taught the invention substantially as claimed including a method for executing an object in a wireless internet access terminal, comprising steps of:

- b. interpreting data inputted through the internet and display the inputted data (col.2, lines 32-37, col.3, lines 17-32, 59-65, col.8, lines 64-67, col.9, lines 1-10) on a screen of the wireless internet access terminal, said data including plural objects that are each linked to predetermined resource location information (col.3, lines 24-32, col.7, lines 4-14, col.8, lines 64-67, col.9, lines 1-10).

Kotola did not specifically teach to focus any one of the objects displayed on the screen and to select and execute any one of various execution items of the focused object according to an input state of a single button. Kraft taught a data entry method to focusing (highlight) any one of plural objects (fig. 6, col.1, lines 20-27, 30-36) and to display plural execution items sequentially one by one by displaying one of the plural execution items of the focused object on one screen (abstract, col.1, lines 20-27, 30-36, 52-59) and executing an execution item displayed

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on the present screen by inputs from a button (fig. 6, col.1, lines 52-59, col.2, lines 28-41, col.3, lines 35-40, col.12, lines 63-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola and Kraft because Kraft's teaching of displaying and highlighting the objects, selecting and executing the highlighted object according the input state of a single button eliminates the needs of using or having multiple buttons for selection on the mobile device and can reduce the size of the mobile device such as a cellular phone.

Kotola and Kraft did not specifically teach that the input state of the button include a short time period input, a long time period input, and a twice consecutive input. However, it is well known that a button can support different input states. For example, the left button of a computer mouse is provided with three different input state: 1) a short click highlights an object, 2) double click executes or opens an object, and 3) press and hold the button allows mouse to select more than one objects. Another example is the power button of a Palm pilot which is given two different input state: 1) short time period input turns on the device and 2) long time period input turns on the back light to night viewing. Any computer or palm pilot user would have easily acknowledged that a button can be implemented to support multiple input states. Furthermore, Tuoriniemi taught to use a single button with different input states to send commands to a headset control system used with a cellular phone (col.3, lines 47-48, col.4, lines 46-59, col.5, lines 20-29, col.6, lines 50-57, fig.6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and Tuoriniemi because Tuoriniemi's teaching of providing three or more different input



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state to a single button reduce the number of unnecessary buttons on Kotola and Kraft's apparatus.

As per claim 3, Kotola, Kraft and Tuoriniemi taught the invention substantially as claimed in claim 2. Kotola further taught to include that wherein the execution items of an object include operations of updating a screen while navigating according to the resource access location information (col.7, lines 4-10); updating a screen for displaying the resource access location information (col.7, lines 10-18); and storing the resource access location information in a temporary storage unit to be immediately accessed in the necessity of a user (col.7, lines 19-28).

As per claim 12, Kotola, Kraft and Tuoriniemi taught the invention substantially as claimed in claim 2. Kotola further taught that each object is defined by at least one HTML tag (col.7, lines 28-51).

As per claim 13, Kotola, Kraft and Tuoriniemi taught the invention substantially as claimed in claim 12. Kotola further taught that wherein the resource access location information linked to a corresponding object is an attribute of the least one HTML tag defining the corresponding object (col.7, lines 28-51, 60-67, col.8, lines 1-21, 45-59).

As per claim 9, Kotola and Kraft taught the invention substantially as claimed in claim 4. Kotola further taught that a screen is updated while navigating according to the resource access location information (col.7, lines 4-10). Kotola and Kraft did not teach that the screen is updated if the input from the button lasts for less than a certain time period. However, it is design choice for one of ordinary skill in the art to select any type of inputs and sign it to use for displaying the plural execution items of the focuses object or execute the displayed item. Microsoft Windows

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allows users to change the button assignments to suit user preferences. Furthermore, Tuoriniemi taught to use a single button with different input states to send commands to a headset control system used with a cellular phone (col.3, lines 47-48, col.4, lines 46-59, col.5, lines 20-29, col.6, lines 50-57, fig.6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and Tuoriniemi because Tuoriniemi's teaching of providing three or more different input state to a single button reduce the number of unnecessary buttons on Kotola and Kraft's apparatus.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotola et al (hereinafter Kotola), US Patent 6,321,257, and Kraft et al (hereinafter Kraft), US Patent 6,487,424, as applied to claims 1-4 and 8-11 above, and further in view of Mitchell et al (hereinafter Mitchell), US Patent 5,966,671.

As per claim 5, Kotola and Kraft taught the invention substantially as claimed in claim 4. Kotola and Kraft did not specifically teach that the inputs from the button to include an input lasting for more than a certain time period and a stop of the input. However, it is well known in the art to use a long pause input and a stop of the input. Such example can be found in a Palm pilot's power button. One can press and hold the power button for a certain time period to turn on the back light for the screen and also use the same button to turn off the light. Mitchell taught a mobile phone system to include a smart button uses a long press and a short press as different inputs (col.4, lines 36-38, 42-48, 55-56, 59-62) that enables one-hand operation (col.1, lines 66-67b col.2, lines 2-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and Mitchell because Mitchell's

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teaching of using long press and short press for a button enables the buttons on Kotola and Kraft's apparatus to control more functions using only one hand.

As per claim 6, Kotola, Kraft and Mitchell taught the invention substantially as claimed in claims 4-5. Kotola, Kraft and Mitchell did not specifically teach that the plural execution on times are sequentially displayed if the input from the button lasts for more than a certain time period, and an execution item displayed on the present screen is executed if the input is stopped. However, it is design choice for one of ordinary skill in the art to select any type of inputs and sign it to use for displaying the plural execution items of the focuses object or execute the displayed item. Mitchell taught to use the long press to initial or end a call (col.5, lines 57-60, col.6, lines 12-16). Microsoft Windows allows users to change the button assignments to suit user preferences. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft, Mitchell and further assign different inputs to execute different commands in Kotola, Kraft and Mitchell's apparatus according to design choices.

As per claim 7, Kotola, Kraft and Mitchell taught the invention substantially as claimed in claim 6 including displaying a first item of a menu on the screen if the input last for more than a certain time period and executing an execution item displayed on the present screen if the lasting input is stopped (see claims 5-6 rejection). Mitchell further taught to judge if the certain time period elapses; judge if the input still lasts in case the certain time period elapsed; and judge if the item displayed on the present screen is the last one in case that the input still lasts (col.6, lines 44-51).

Kotola, Kraft and Mitchell did not specifically teach the steps of:

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- c. Branching to the time period elapse judgment step after displaying a next item on the screen if the item is not the last one; and
- d. Branching to the first item display step after displaying a “cancel” time if the item is the last one.

However, it is well known in the art to provide the same features for different windows. For example, each different window in Windows environment is give the function of close, minimize, maximize, size and move even when the contents displayed in the windows are different. It would have been obvious to one of ordinary skill in the art to provide judgment step for a next item on the screen so to determine whether the time period elapsed or not.

Furthermore, it is obvious to loop the options back to the first one when the option display reaches the last one so the display of the options can be continuously. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and Mitchell and circularly loop the options so to continuously display the options.

**(11) *Response to Argument***

The examiner summarizes the various points raised by the appellant and addresses replies individually.

As per appellant's argued that:

(1) Kotola and Kraft references, either alone or in combination, do not teach the limitation of “interpreting data inputted through the internet and displaying the inputted data on a screen of the wireless internet access terminal, said data including plural objects that are each

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linked to predetermined resource location information". Appellants argue that sending an SMS message that includes a short keyword that is later mapped to a URL when the SMS message is processed at a short message service center does not correspond to displaying objects that are linked to URLs on a screen of the wireless internet access terminal. The response to the SMS request for a WWW page returned is merely a text message.

**In Reply** to argument (1): Appellants *incorrectly* pointed out that the response to the SMS request is merely a text message. Kotola teaches the short message to comprise data including plural objects (col.3, lines 24-32, col.7, lines 38-51, 66-67, col.8, lines 1-33, 64-67, col.9, lines 1-10). Kotola not only teaches that the short messages can store plural objects that are text messages (col.8, lines 1-5), but also that the short messages can contain objects such as identifiers and keywords that link to WWW pages (col.3, lines 24-32, col.7, lines 38-51) or objects in HTML format (i.e., HTML tag) of a WWW page content (col.7, lines 38-51, 66-67, col.8, lines 1-33, 64-67, col.9, lines 1-10; HTML tag format objects) where the objects may each link to a predetermined resource access location information (WWW pages). Kotola taught the limitation of interpreting data inputted through the internet and displaying the inputted data (col.2, lines 32-37 states converting a relevant part of the content of WWW page into a short message where the inputted data is a short message format of the WWW page; e.g. interpreting data inputted through the internet; col.3, lines 17-32, 59-65 further stated obtaining data from WWW page; col.8, lines 64-67, col.9, lines 1-10) on a screen of the wireless internet access terminal (col.2, lines 32-37; displaying the contents on the display of the mobile station where the content is a short message format of the WWW page; e.g. displaying inputted data on screen of wireless internet access terminal), said data including plural objects (short message format of

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the WWW page includes text, keywords, identifiers and/or HTML format of the WWW page; col.3, lines 24-32, col.8, lines 64-67, col.9, lines 1-10) that are each linked to predetermined resource access location information (col.3, lines 24-32 stated that short message containing keywords and identifiers linking WWW pages, col.7, lines 4-14). Furthermore, Kotola specifically teach to use URL addresses to directly indicate requested WWW pages (col.3, lines 17-21; ...a mobile user sends to the service center a short message including an identifier for directly or indirectly indicating said WWW page. Direct indication includes e.g. the address of the WWW page, URL).

(2) Kotola and Kraft references, either alone or in combination, do not teach the limitation of “displaying plural execution items sequentially one by one by displaying one of the plural execution items of the focused object on one screen and executing an execution item displayed on the present screen by inputs from a button”. The execution items are not displayed sequentially one by one on the screen but a second display part of the screen.

**In Reply** to argument (2): Examiner has relayed on Kraft reference in teaching displaying plural execution items sequentially one by one by displaying one of the plural execution items of the focused object on one screen and executing an execution item displayed on the present screen by inputs from a button. Kraft taught a data displaying method to focusing (highlight) any one of plural objects (fig. 6, col.1, lines 20-27, 30-39; highlight one of information candidates; i.e., short message of Kotola’s method) and to display plural execution items sequentially one by one by displaying one of the plural execution items of the focused object on one screen (abstract, col.1, lines 20-27, 30-39, 52-59, figs. 3-5; rolling roller wheel to

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display highlighted item) and executing an execution item displayed on the present screen by inputs from a button (fig. 6, col.1, lines 52-59, col.2, lines 28-41; only using a single key, col.3, lines 35-40; press a single button to execute the highlighted item, col.12, lines 63-65; item includes calculation). One would have been motivated to adapt Kraft's teaching of displaying plural execution items to implement said calculator functions in their mobile phone systems using such displaying and item focus method (col.12, lines 28-67, the executable mathematical functions are displayed on the screen one by one in sequence, fig.5). One would have also been motivated to use Kraft's displaying method since it provides an organized method of displaying with easy control from a single button and supports complex signs displaying that includes said Chinese characters or so on (col.1, lines 52-59, col.2, lines 28-41, col.3, lines 11-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola and Kraft because Kraft's teaching of displaying plural execution items sequentially one by one provides an organized screen display and allows user to easily view and pick the desire objects such as the identifiers and keywords of the short messages of Kotola's method for execution and further enables the objects to include complex signs or characters (col.1, lines 20-27, 30-36).

Although the display of execution items taught by Kraft is displaying on a second display part of the screen (dedicated a portion of the whole screen to display items, not separate displaying screen), it is still being displayed on the screen of the mobile station (mobile station contains only one screen). Hence, Kraft's teaching reads on the claim language as claimed.

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(3) Examiner fails to derive a reasonable suggestion or motivation for combining Kotola and Kraft.

**In Reply** to argument (3): Appellant has *mistakenly* believed that the examiner is relying on Kraft's teaching of character entry in combination with Kotola's method to overcome the claimed limitations. However, the examiner merely rely on Kraft's teaching of displaying items in combination with the teachings of Kotola's method of displaying plural objects (keywords and identifiers) of data inputted through the internet (short message format of WWW page) on the screen of the wireless internet access terminal. Since Kotola already taught to display the received data (col.2, lines 32-37, col.3, lines 17-32, 59-65, col.8, lines 64-67, col.9, lines 1-10; a short message format of the WWW page including keywords and identifiers or in HTML format of the WWW page), Kraft reference is relied upon to reject the limitation of displaying such as displaying execution items in sequence and using single button. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Kotola's teaching of a method of entering information into a terminal, displaying, navigating through a plurality of options and selecting one of the options in combination with Kraft enables user to increase the data entry rate and also handling of complex signs (col.1, lines 30-36, 49-59, col.3, lines 11-20). One would have been motivated to use Kraft's displaying method since it provides an organized



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method of displaying with easy control from a single button and supports complex signs displaying that includes said Chinese characters or so on (col.1, lines 52-59, col.2, lines 28-41, col.3, lines 11-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola and Kraft because Kraft's teaching of displaying plural execution items sequentially one by one provides an organized screen display and allows user to easily view and pick the desire objects such as the identifiers and keywords of the short messages of Kotola's method for execution and further enables the objects to include complex signs or characters to support different languages (col.1, lines 20-27, 30-36).

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

*ksl*

ksl  
December 22, 2004

*Zarni Maung*

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